

Title (en)

N,N-DIHYDROCARBONYL AMINO CARBOXYLIC ACID, PREPARATION METHOD THEREFOR, AND USE THEREOF

Title (de)

N,N-DIHYDROCARBONYL-AMINOCARBONSÄURE, HERSTELLUNGSVERFAHREN DAFÜR UND VERWENDUNG DAVON

Title (fr)

ACIDE N,N-DIHYDROCARBONYLAMINOCARBOXYLIQUE, SON PROCÉDÉ DE PRÉPARATION ET SON UTILISATION

Publication

EP 4137478 A4 20230816 (EN)

Application

EP 21863068 A 20210629

Priority

CN 2021103175 W 20210629

Abstract (en)

[origin: EP4137478A1] The present application provides an N,N-dihydrocarbonyl amino carboxylic acid, a preparation method therefor and use thereof. The N,N-dihydrocarbonyl amino carboxylic acid can be used as an extractant for enriching rare earth elements from raw materials containing low-concentration rare earth elements, separating and purifying yttrium element from a mixed rare earth raw material, and separating elements such as aluminum, iron, radioactive thorium, radioactive uranium, actinide and etc. from a mixed rare earth raw material. The compound can be synthesized in a simple and cost-efficient way. As an extractant, it has good chemical stability and has good resistance against strong acid and strong alkali without decomposition.

IPC 8 full level

C07C 227/04 (2006.01); **C07C 229/12** (2006.01); **C07C 229/30** (2006.01); **C07C 231/02** (2006.01); **C07C 233/09** (2006.01); **C22B 3/32** (2006.01); **C22B 59/00** (2006.01)

CPC (source: EP US)

C07C 229/30 (2013.01 - EP); **C07C 233/47** (2013.01 - US); **C07C 233/49** (2013.01 - US); **C22B 3/32** (2021.05 - EP US); **C22B 59/00** (2013.01 - EP US); **Y02P 10/20** (2015.11 - EP)

Citation (search report)

- [A] EP 2404892 A1 20120111 - SHINETSU CHEMICAL CO [JP], et al
- See references of WO 2023272497A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

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DOCDB simple family (application)

EP 21863068 A 20210629; AU 2021310844 A 20210629; CA 3150346 A 20210629; CN 2021103175 W 20210629; CN 202180004552 A 20210629; JP 2022532696 A 20210629; US 202117639137 A 20210629